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VETERINARY RECORD.

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Presidential Address on "The Comparative Section."*

By FREDERICK HOBDAY, C.M.G., F.R.C.V.S., F.R.S.E., Kensington.

In the first place, I wish to be allowed to express my appreciation of the great honour you have done me in electing me as the first Veterinary surgeon to occupy the Presidential chair; and I will promise that no effort on my part shall be spared to help forward the study of the comparative aspect of disease and to keep together the *entente cordiale* spirit which at present exists between the latest baby of the Royal Society of Medicine—the Section of Comparative Medicine—and the other branches of its distinguished family.

I do not look upon it so much as a personal honour as a courteous acknowledgment to the veterinary profession, as through the idea of the Comparative Section the way has been paved whereby Members and Fellows of the Royal College of Veterinary Surgeons can belong to (and obtain the full privileges of) this great Society, which is one of the largest and most broad-minded in its views of all the Medical Societies in the world—the access to whose library (of over 100,000 volumes) alone will save more to a reading man in one month than the cost of his subscription.

I think that the beginning which we have made here in this magnificent and well-equipped building, of forming a Section where those who make their life's study the diseases of the animal kingdom can meet and discuss disease problems with those whose lives are equally busily occupied with human disease problems—and *vice versa*—will have such far reaching effects that in the future we shall wonder how we existed so long apart.

That this idea of an *entente cordiale* between the two branches of medicine has "caught on" is already proved by the successful meetings which we have held during the past Session—and by the meetings which have already begun to be held in other parts of the country—dealing with the analogies and differences between the diseases of animals and those of man.

So far as I am aware, the idea of the formation of a Comparative Section of the Royal Society of Medicine, which would take within its embraces all who desire to study the relationship existing between the diseases of animals and man, really originated in 1921, when I approached the courteous and indefatigable Secretary of the Society, Sir John McAlister, with the support of those two great friends of the Veterinary profession and former Lecturers in the Royal Veterinary College, Sir John Bland-Sutton (who was then President) and Sir D'Arcy Power. I was not then aware that Sir Clifford Allbutt had had a somewhat similar scheme in hand some years before, but as soon as I knew I approached him and he at once accorded it his unstinted support, as did also the late President, Sir William Hale-White.

I personally wrote to some 300 members of the medical and veterinary professions, and the replies which I got were most enthusiastic and encouraging in support of the idea.

A preliminary meeting was held, with the ultimate result that a scheme, putting forward the idea of the formation of such a Section, was adopted at a General Meeting of Fellows on the 19th of June, 1923, the first Inaugural Meeting being held on the 6th of July.

At the present moment we have a total of 191 members, of whom 127 are consultants or practitioners of the human branch of medicine, and sixty-four are veterinarians.

In order to try to find a suitable name for the section, a plebiscite was taken of all those who had displayed interest in its formation and welfare, and the votes wavered principally between "Comparative Medicine" and "Comparative Pathology," some favouring a combination of the two under the compound title of "Comparative Medicine and Pathology."

Eventually the title of "Comparative Medicine" was selected, and personally I was glad, for this heading gives a latitude which covers everything pertaining to the diseases of the human and animal worlds, whilst it also embraces those of fish, insects and plants. The word "veterinary" had been suggested but was carefully avoided, as it would have savoured too much of the "water-tight compartment," as for anyone who wishes to discuss the medicine and pathology of animal diseases *per se*, there is ample field in the twenty-two branches of the National Veterinary Medical Association, whose ramifications extend throughout Great Britain, Ireland and the Colonies.

We have made a good start, and the past session has been a very successful one. In addition to the stirring Presidential Address of the Rt. Hon. Sir Clifford Allbutt, we have had papers from the following gentlemen:—

Mr. Hobday: "Cryptorchidism in animals and man."

*Delivered before First Meeting of the Section of Comparative Medicine held at the Royal Society of Medicine, 1 Wimpole St., Oct. 22nd, 1924.

Dr. S. G. Billington: "Some unusual methods of culturing the blood with special reference to distemper."

Professor E. Mellanby: "Diseases of nutrition in animals."

Dr. T. W. M. Cameron: "The pig and human diseases."

Dr. N. S. Lucas: "A comparison of the pathology of captive animals with that of man."

Dr. F. E. Crew: "Achondroplasia in man and animals, with special refreence to the 'bulldog' calf."

All have been enthusiastically discussed; whilst for the forthcoming session the offers already made show that we shall have no lack of essayists and interesting subjects.

By the rules of the Section, the President must be alternately a member of the medical profession on one occasion and a member of the veterinary profession on the next, and the President can hold office for two consecutive years. Half the Vice-Presidents hold medical, and the other half veterinary qualifications; and the Council is built up in the same way; whilst the Secretaries are chosen similarly. You will thus see that the intention is to give the utmost facilities for a meeting on common ground of students of the two branches of medicine, the human and the veterinary. The ground to be covered is enormous and it is hoped that the benefit will be mutual, for there are many diseases intercommunicable between animals and man, many which are analogous, and many which show totally different methods of manifestation; the contrasts of the latter being not only between man and animals, but between the different varieties of animals themselves.

As illustrations of the intercommunicable diseases in this country alone, one has only to mention amongst the common ones, glanders, tuberculosis, anthrax, rabies, mange, ringworm and trichinosis; whilst amongst important matter which can be studied on analogous lines we have, as illustrations, such diseases as influenza, pneumonia, tetanus, internal parasitic affections, diabetes, cystitis, pyorrhea, dental caries, very many surgical operations, the formation of cancerous and other tumours, and a host of others too numerous to mention; whilst abroad we have the study of trypanosomiasis, piroplasmosis, and others, of which we shall hear from Mr. Montgomery to-night. As an instance of one showing a startling difference in its power of infecting some species and failing to infect others, we have the great and fatal virulence of the ravages of the *Bacillus mallei* for man and the horse tribe, and the immunity possessed by the ox; and, *per contra*, the extreme sensitiveness of the ruminant and pig tribes to foot-and-mouth disease and the comparative insensitiveness of the horse and ass. The comparative immunity of the dog to anthrax, too, as compared with the extreme fatality of this disease when attacking other animals, is another instance which requires explanation.

That there are reasons for all these things is very obvious, for Nature never does anything without a reason, and it is by a more complete knowledge of the comparative aspects, such as we hope to get by a combined and mutual study, that we shall make further and substantial progress in the fight against disease.

It now remains for us, the members of the Section of Comparative Medicine, to prove our value, and to show that the trust put in us by the Council of the Royal Society of Medicine by adding our name to their already specialised and lengthy list, has not been misplaced. This we can certainly do if only we will take up our responsibility individually and seriously, by contributing original work to the papers and discussions, both of our own and other Sections, and thus do our bit to prove that the two branches of medicine, human and veterinary, can mutually assist one another. These two branches have the same original stock and origin and must absolutely pull together and not be selfish or work in separate water-tight compartments.

There is Comparative work to be done in every Section, and, in each, much can be mutually learned by comparison between the method of working which brings the desired successful result in the man or the animal, and between the symptoms caused by the same disease in each respective variety of patient. Flesh is flesh, whether of the high or the low animal, and disease is a common enemy to be attacked by all of us in our own special way, according to the opportunities which experience presents to us individually and collectively. The foundation of our present position in the administration of anæsthetics, the splendid safety of our present day surgery, the study of therapeutics and pathology, even medicine itself, all had the principal part of their pioneer work done upon animal patients before being applied to humans.

Epidemiology, tropical and war diseases, the study of clinical cases and of dermatology; of neurology, laryngology, ophthalmology, odontology and otology; of obstetrics, urology, and in fact every sub-division or Section of the Royal Society—not even omitting psychiatry—can learn something from the comparative side—and who is so competent to put this forward as the trained and observant veterinarian? My experience has always been that one's views are always listened to with the utmost courtesy, and the presence of a Member of another Section is always welcomed. I mention this to encourage members of my own profession to attend the other Sections whenever there is anything to interest them, and because I know that in the past they have been unnecessarily diffident about so doing.

With the request that every Member of the Section will do his utmost to add something to the discussions at the meetings during the forthcoming Session, I will now bring my address to a close—as we are fortunate to-night in having with us a very distinguished essayist (Major Eustace Montgomery, the Chief Veterinary Adviser to the Government of East Africa), who will tell us of the diseases in that part of the world which need a closer union of medical and veterinary science in order to bring about their prevention and extinction.

Foot-and-Mouth Disease.

Slaughter and Isolation: A Comparison.

In considering eradication of disease as a policy, it has to be expressly noted that owing to the insular position of this country it lends itself particularly to a policy of eradication—given a disease which is eradicable—since the importation of animals can be effectively controlled. It is also to be understood that a policy is something applied to a country as a whole, otherwise it is not a policy.

Foot-and-mouth disease, however, occupies this peculiar position, that, although effective control of importation of animals diminishes enormously the opportunities for invasion, infection can invade a country in other ways, hence exclusion or control of importation of animals is not a completely effective barrier to invasion by this disease.

It must be admitted on the evidence of experience that the so-called slaughter policy is an effective method of eradication as regards foot-and-mouth disease, even when the disease has managed to establish a more or less wide-spread footing. That does not seem to be arguable, although there are a few who do argue against the demonstrated fact, in order to support the alternative policy—so-called isolation. Denying facts seems a wrong method of supporting an alternative, which should not require such aid if it has merit.

The arguments in favour of eradication, viewed purely for the moment as a method of getting rid of an invasion of disease—and at present there is no method of eradication other than slaughter of affected animals and those in direct contact applicable to foot-and-mouth disease—are that the disease, once it fully establishes itself in a country, can be spread by many avenues which, humanly speaking, are not controllable, and by others which can only be partially controlled, and that the only effective method therefore, is to prevent the manufacturers of the virus of the disease, so that these agencies of spread cannot act. It is to be understood that in addition to destroying the manufacturers of virus all practicable measures are prescribed to control the agencies of spread (disinfection, control of movement of human beings, such as farmers, farm labourers, dealers, butchers, local tradesmen, animals, etc., so far as they can be applied); that even in the best conditions for application, some spread almost inevitably occurs even under the slaughtering-out method, but notwithstanding this, experience proves that the method succeeds.

Almost all of those who have contended against the slaughter policy as a method have made the reservation that at the start of an invasion it is the right way to proceed, but also contend that the so-called isolation method should be adopted when the outbreaks have progressed to a certain degree in spite of slaughter, the degree not being stated. That is obviously wrong, unless they mean what they do not mean, progression to a degree which makes the policy economically impracticable (serious depletion of stock and financial considerations). So-called isolation (see later as to misuse of term) means an enormous organisation for supervision of premises (for one thing alone it would mean police, three shifts a day, on duty for eight hours, over a period of about three weeks on each premises), which would soon become utterly impossible if disease spread. The truth is that if an "isolation" policy could be effective at all as a means of preventing spread, it would have most chance of success at the start of an invasion, when the infected premises or centres would be few enough to make some serious degree of supervision practicable, but given spreads, the impracticability increases daily. What occurred in Cheshire is a good illustration of this. Police assistance became unavailable for a time, even for the slaughter procedure; there was a sudden and serious increase in the outbreaks, many of which to all intents became so-called isolation outbreaks until they could be dealt with by slaughter, with the result that the position came near to being impossible as regards eradication. It was absolutely impossible as regards isolation. Yet, it may be said now, that the slaughter policy even there, overtook the spread under the worst conditions.

When isolation is spoken of as a policy it is assumed that something is possible approximating at least to the conditions of isolation hospitals for human beings suffering from infectious diseases. As certain medical officers, moved by the best intention but not cognisant of the facts, have been responsible for these suggestions, it should be noted:—

(*a*) That organised hospitals of the kind, and fever vans for patients, are impossible as regards farm stock; (*b*) that for human beings their cost over the whole country amounts to continuous and huge annual payments; (*c*) that in spite of these organisations against human plagues, excellent in theory and sometimes to a large extent in practice, they have entirely failed to prevent enormous epidemics of such diseases as measles (7,000 cases lately reported in London alone), and influenza, although the medical profession is working under infinitely better conditions as regards general hygiene and the patients concerned, and against diseases incomparably less contagious than foot-and-mouth disease. With the above important differences the difficulties are the same, viz., that the kind of attention in the use of disinfection and isolation, etc., which is practicable, is inadequate to prevent the spread of infection until the human patient is housed and interned in bed; (*d*) that the vast majority of domestic animals are never housed, could not be housed, and could not be maintained commercially if they had to be housed. They live in promiscuity in fields, in open yards, or on more or less remote hill pastures. Even those which are housed at night are usually in buildings and surroundings which make so-called isolation impossible. At least 90 per cent. of farm premises are unsuitable for isolation and the conditions under

which the stock industry is conducted, buying, selling, markets, etc., hopelessly accentuate this unsuitability.

Against the eradication policy it is said:—

(*a*) That it is costly in money. It may be, but the cost arising from a policy of isolation is more so, and repeats itself to the same degree for years. The cost to French agriculture of this regime in a recent year had been put at £5,000,000, and that of Holland at half that sum. These estimates, however, can only be approximate. Whatever they actually are, they are enormous, and in Great Britain they would be greater. Further, the export trade in stock, which to this country is an inestimable asset, will entirely cease if the disease be allowed to establish itself. Recently the question has assumed a still more serious phase. Other countries have made regulations against trades in general with infected countries as regards goods which require hay and straw for packing.

As regards the actual expense of stamping out by slaughter over a period of 31 years, it works out at £130,000 a year, or an insurance policy of about 10d. per £100 on the estimated gross value of the national stock. If, however, the last three years (abnormal largely on account of the legacies on the Continent, our main source of invasion, left by the war) are eliminated, the annual cost would have been £9,000.

(*b*) That it depletes to an injurious degree the stock of the country. It might have this result, but it has never been suggested that the eradication policy should be pushed to such a degree. Even in the abnormal outbreaks of the last eighteen months, the necessary slaughter has amounted to only a very small percentage of the stock of the country (cattle, 1.5 per cent.; sheep, 0.2 per cent.; and pigs, 1.7 per cent.), and it has to be noted that the bulk of the animals slaughtered were bred to be slaughtered for food, in any case. The case of Cheshire, however, has been peculiar. There the conditions happened for the time being to be particularly favourable to spread, and a large amount of the stock was dairy cattle, kept for the manufacture of cheese. The local incidence of depletion of this kind of stock was certainly heavy, about one-third of the cows of the county. The case of Cheshire is certainly a hard one, and some of the local farmers have, not unnaturally, felt that they have had to bear the brunt of the burden, such as it is, for the benefit of the rest of Great Britain under a national policy. On the other hand it is only fair to the rest of Great Britain to point out that Cheshire has habitually been saved from any losses of the kind for many years by the eradication policy, the burden of which has fallen elsewhere.

It is also claimed for an isolation policy:—

(*a*) That the disease is not fatal, is mild, and can be cured. It is curable, like most diseases, but the mortality varies from 5 per cent. to 20 per cent. according to the virulence of the invading type of disease. In pregnant animals, especially ewes, the mortality and suffering may be appalling. Apart from mortality there is often heavy consequential loss—setbacks in condition, permanent damage to udders of cows, casting of hooves, and prolonged restrictions on trade.

(*b*) That the spread can be effectively controlled without slaughter of affected animals and those destined to become affected. The arguments against this are stated in the preceding paragraphs. It should be added, however, that in the experience of the Ministry there are practically always spreads to other premises from outbreaks dealt with under the best conditions for isolation, and this can only mean, if the policy is isolation, that the spread will progress and again progress from the further cases until a whole country is invaded. This is what has happened on the Continent under a policy of isolation, and since 90 per cent. at least of the farm premises in this country are unsuitable for isolation, and since for the majority of the stock "premises" means nothing more than pastures, it would inevitably happen here.

(*c*) That the restrictions on movement and interference with business need not be more drastic under an isolation policy than under a stamping-out policy. That is so, but under the former they would last for many months, even years, and extend to the whole country, while under the latter there is finality as regards this and that invasion or outbreak. There would arrive a time when the disease would just have its own way, as it were, since it would be impossible effectively to control the number of infected premises, and the British public would not tolerate being policed for such long periods for no material result.

Until a better method of eradication than slaughter of the affected animals and of those in contact becomes available, which everyone would of course welcome, the choice lies between the stamping-out method or having the disease always with us in enzootic form.

Ministry of Agriculture.

Fellowship Examination.

An Examination for the Fellowship Diploma was held at The University, Liverpool, on Thursday, 19th December, 1924, when the following candidate was successful:

L. W. Wynn Lloyd, Carnarvon.

Subject:—MEDICINE.

Thesis: "The Treatment of Rumenal Diseases based on Physiological Facts."

Examiners:—F. T. Harvey, F.R.C.V.S.; J. Penberthy, F.R.C.V.S.; Chairman, H. Sumner, M.R.C.V.S.

FRED BULLOCK,
Secretary.

The largest sheep station in the world is Tierra del Fuego, in the southern part of Chile. One company there shears two million five hundred thousand sheep annually.

Royal College of Veterinary Surgeons.

DECEMBER EXAMINATIONS, 1924.

LIST OF SUCCESSFUL CANDIDATES—(*continued*).

LONDON.

Class A.

Bhandari, M. S.
*Hale, D. M.
Hodgman, S. F. J.
Thompson, P. G. M.
Turney, J. T.

Class B.

Bruford, J. W.
Danby, D. C. E.
*Dowling, R. E. C.
Wood, J. H.

Class C.

Barry, W. R.
Conisbee, E. G.
Datta, S.
Ghulati, P. R.
†Golledge, C. R.
Gooch, F. W. L.
Griffiths, J. B.
Parry, A.
Thompson, C. B.
Tuckey, R. E. S.
Wood, A. E.

Class D.

Boucher, H. L.
De Wet, G. J.
Elphicke, C.
Emson, P. E.
Howell, W. E.
Pugh, C. J.
Stephens, J. C.
Stephens, J.
Swaby, R.
Theiler, H.
Turner, K. D.

GLASGOW.

Class A.

*Thomson, A.
Blair, H. G.
Hamilton, J. C.

Class B.

Kyle, J. B.
Morris, H. V.
Patterson, J. H.
*Robb, A. H. F.

Class C.

Barclay, J.
Herratt, J.

Class D.

Barbour, D. S.
Dykes, G.
Mitchell, J. M.
Smith, W. C.

EDINBURGH.

Class A.

Blair, J. S.
Dawe, E. C. S.
*Harvey, C.
Kennedy, D.
*Macpherson, D. A.
Macpherson, D. F.
Michie, N. G.
Reid, J.
Ross, D. G.
Spreull, A.
Strachan, C. G.

Class B.

Bain, H.
Cameron, J.
*Danks, W. B. C.
Findlay, J. H.
Fotheringham, W.
Hamilton, A. P.
Kyle, R. S.
Linton, J. J. K.
Willett, R. A.

Class C.

Gray, W. S.
Heveningham, A. G.
Laing, J. McL.
*Leslie, A.
Mitra, A. K.
Robertson, E. D. S.
Scott, C.
†Sharp, S.
Skinner, T. S.
Weighton, C.
Welsh, W. C.

Class D.

Bain, R. F.
Cowin, G. S.
Davies, H.
Forbes, J. T.
Innes, J. R. M.
Isherwood, W. P.
Jamieson, G. R.
Jones, W.
Kerr, W. R.

Class D (continued).

Larnach, A. M.
McRorie, J. M. T.
McShane, H. G.
Mitchell, J. G. C.
Runciman, W.
Snodgrass, P. L.
Watson, R. J. P.

LIVERPOOL.

Class B.

Prescott, E. W.

Class D.

Beckett, F.
Booth, F.
Elliott, W. B. J.
Shuttleworth, A. C.
Storrar, J.
Watson, L. A.

†Denotes 1st Class Honours.
*Denotes 2nd Class Honours.

Raising a Fallen Horse with Rope.

We reproduce the following article by Dr. A. C. Wight, from the December issue of *Veterinary Medicine*, Chicago.

The only articles required are a block and tackle of sufficient strength to raise the horse, and thirty feet or more of rope, one-half inch or more in thickness. These items can be easily procured anywhere. The block is fastened to the ceiling or any other place above the horse in the usual manner.

The rope is handled as follows, first being doubled:

1. Pass the doubled end of the rope over the head backward to where the collar rests on the neck.
2. Pass free ends of the rope between the front legs, crossing it once just before it goes between the legs.
3. Pass lower rope under body, so that it emerges just posterior to the withers.
4. Lay upper rope over thorax, so as to cross lower rope at this point.
5. Bring lower rope over body and between hind legs.
6. Pass upper rope under body in a position to correspond to the other rope, bringing it back between the hind legs. Cross the ropes at this point.
7. Bring both ropes up over buttocks, one on each side of the tail.
8. Pass forward along the spinal column under the ropes where they cross on the back, and tie to point where the rope lies on the top of the neck.
9. Insert hook of block at point where the ropes passing over the back cross, being careful to engage all the ropes at this point, namely, the single strands crossing to go between the hind limbs and the double strand coming from each side of the tail to the neck.

All ropes should be drawn as tightly as possible before the knot is tied, so that all slack is taken up.

The sling is very easily applied (one man can do it in a pinch) and the horse in his struggles cannot fall out of it. The body is always right side up, neither end higher than the other, and the feet are always in a position so that they can be utilized to the best advantage. Contrary to this, a sling is hard to apply, it requiring considerable strength to pass a canvas under a horse; the accessory harness cannot be easily adjusted; in the process of raising, the horse will lunge and fall out or turn on his side; and,

(Continued at foot of first column next page.)

The Veterinary Record.

3rd January, 1925.

A NEW YEAR'S MESSAGE FROM THE PRESIDENT.

In this our first issue for the year 1925, we extend to our members and readers sincere wishes for a happy and prosperous New Year. For two or three years agriculture has been travailing in a slough of acute depression. The veterinary profession is so intimately related to agriculture that our members could not hope to escape altogether the effects of that depression. But it is beyond doubt that its more acute phases have passed, and that there are many indications of better promise for the future. We trust that the year on which we are now entering may see in some considerable measure the realisation of that promise, thus improving the outlook in the immediate future for our own members.

A few days ago, a statement appeared in the public press to the effect that " among the problems occupying the attention of the Minister of Agriculture is the backward state of the veterinary profession. It is felt that progress in the study of the diseases of animals has been less than has been made in other branches of science." . . . " Major Wood is appreciative of the great work which has been done in spite of financial and other handicaps, but is anxious to see the veterinary colleges more thoroughly equipped for both research and teaching." We do not admit that " the backward state of the veterinary profession " is a correct description of our condition, but we do admit that progress has been neither so rapid nor on such a broad basis as we would desire. And the reason is entirely financial. Men and material have been available in plenty, but the means of doing the work have been lacking. In the past neither research nor teaching has offered prospects sufficiently attractive to tempt or to retain more than a few of the best men available. It would be true to say that a genteel poverty appeared to be the only prospect in front of the young graduate who ventured to undertake research or laboratory work. Similarly with junior teaching appointments. They were attractive to the new graduate, and they provided the opportunity for the training of suitable men both for teaching and research, but hitherto they have been devoid of prospect for the future, except for a very small fortunate few who have been recruited for special work in the Colonies and Dependencies.

We think the year 1925 will see distinct progress made in the right direction. Quite recently the foundation stone was laid of the new research institute associated with the London College. Important work has been done in the past in this institute under handicapped conditions, and many valuable contributions to our knowledge have emanated from it. It may therefore, be confidently anticipated that the new buildings with extended equipment, by providing increased facilities for research, and by broadening the scope of the work already instituted, will be productive of results which will amply repay the outlay involved. In Cambridge it is expected that the buildings and equipment in connection with the new Chair of Animal Pathology will be completed this year. The work of organisation is being carried through with characteristic energy, and a band of young enthusiastic workers, from whom great things are expected, has been gathered together. In Scotland the Animals Disease Research Association will be transferred to its new home in Edinburgh, and will be provided with improved equipment and increased laboratory accommodation and in addition, with the means, in close proximity, of keeping experimental animals under natural conditions, which it has hitherto lacked. It is clear, therefore, that during the year a wider field for original work will be opened, and we feel justified in the belief that developments will be initiated which will add to our knowledge and contribute materially to progress. We would, however, express the hope that energy will not be directed wholly to study of the problems of disease, but will also be directed to questions of physiology, helminthology, nutrition, and other branches of veterinary science.

It would give us great pleasure if we were in a position to state that the Minister of Agriculture would, during the present year, translate into concrete form his anxiety " to see the veterinary colleges more thoroughly equipped for both research and

(*Continued from previous page.*)

furthermore, as is not the case with the rope sling, the broad belly-band of canvas so constricts the thorax that in case the horse does not at once attempt to use his legs, he must be let down for fear of suffocation. This fear of suffocation is one objection to the use of the chain block, which is slow in its action, whereas with the rope sling, this feature can be disregarded, as the ropes do not constrict the lungs sufficiently to produce suffocation. I had one horse which hung for forty minutes before he decided to stand up, without appreciable discomfort to the respiration.

Once the practitioner tries this method, he will never more use his sling for this procedure, but will raise the horse in half the time, and with a minimum of discomfort, both to the horse and to himself.

teaching." To be thoroughly equipped they must be adequately financed. This they have never been. Teachers ought to be relieved of extraneous duties in order that they may be free to devote themselves to the work of the subject in which they specialise. Existing financial conditions do not permit this nor do they provide the means essential to the conduct of original work. Given improved financial conditions, the colleges will not be found wanting in their contributions to research and teaching. It is at least a hopeful augury for the future that the official mind is concerned over the requirements of the colleges.

As an Association we enter the New Year with feelings of great hope and confidence in the future. When we look back over the four years which have passed since the Association was revitalised on the conclusion of the great war, we would be lacking in our duty if we failed to express our gratitude to those who, at great sacrifice, steered the ship safely through its initial difficulties and past dangers into smooth waters. And our gratitude is so much the greater because the services rendered were given voluntarily, and without reward. Obviously the Association could not continue to depend indefinitely on voluntary workers for the management of its affairs, and it is a matter for congratulation that the financial position has now permitted payment of an organising secretary and editor of the official journal of the Association. With finances in a sound condition and showing prospects of improvement we feel in a strong position, but we also find much room for encouragement, and hope for the future in other directions. Membership has increased to approximately 50 per cent. of the whole profession, and gradually, but surely, the feeling is being infused into individual members that they constitute a part of a real live organisation working for the common good. We wish to foster that feeling of unity, for in proportion as it grows so will our strength and influence increase. The annual congresses have furnished evidence of its steady growth, and Aberdeen last year cannot fail to have impressed these who were privileged to attend with the progress accomplished. It certainly provided stimulus and encouragement for the future. But we must not be content to remain stationary. We cannot stand still, we must either progress or retrogress. We desire strongly to progress, and we would beg each member to consider it a duty to bring at least one outsider into the fold, and to devote a part of his time, no matter how small a fraction, to the promotion of the interests of the Association and of the Profession to which he belongs.

We would express our appreciation of the influence exercised by the general secretary in attending meetings of divisions and explaining in some detail the various activities of the Association. Without doubt this has been a factor stimulating and rousing the interest and enthusiasm of individual members. But we wish to strengthen and increase this influence for good. It is the privilege of every division to elect representatives to the Council of the Association, and the Council depends on them to voice the views of the divisions. We would, therefore, urge divisions when electing representatives to give consideration to the practicability of the elected attending meetings of Council, and on the representatives, when accepting election, to appreciate the responsibilities which they are undertaking. We desire their helpful criticism and we look for their assistance in framing policy. On them we depend in no small degree to maintain intact the link of association between the parent body and the divisions of which it is composed, and to them we look to stimulate and to create local interest in furthering the progress and aims of our Association.

Numerically we are a small profession. Not only is unity essential to our success, but it is vital to our existence. It is our earnest hope that the year 1925 will bring us nearer the realisation of our ideal as expressed in the motto of the Royal College— *Vis unita fortior.*

A. Gofton.

Importing Pedigree Animals.

Text of Government Bill.

The text is published of a Government Bill to amend the law with respect to the landing in Great Britain of pedigree animals brought from his Majesty's Dominions. The Bill gives authority to the Minister of Agriculture and Fisheries to make orders for allowing, subject to such conditions as may be prescribed by any such order, any cattle, sheep, goats, or swine brought from any part of his Majesty's Dominions, which are shown to his satisfaction to be there registered as pedigree stock in a herd or flock book recognized by him, to be landed in Great Britain without being subject to the provisions of Part I. of the Third Schedule to the Diseases of Animals Act, 1884 (which relate to slaughter at the port of landing), but subject to the provisions of Part II. of that Schedule (which relate to quarantine). No such order may be made except with respect to animals brought from a part of his Majesty's Dominions in which pedigree animals brought from Great Britain are allowed to be landed either unconditionally or subject to conditions (including rate of import duties) which in the opinion of the Minister are not unduly restrictive.

The Bill is presented by Mr. Edward Wood and backed by Mr. Amery and Sir John Gilmour.

CLINICAL AND CASE REPORTS.

Prolapsed Anus in a Shire Filly.

By H. Llewellyn-Jones, M.R.C.V.S., Denbigh.

Subject.—Unbroken two-year-old black shire filly, out at pasture with several others. They were given a ration of long hay twice a week, in an open shed on the field. On one of these occasions the owner himself took the hay and happened to detect a very disagreeable odour when the animals came to partake of their extra ration. He thought at first there was something dead and decomposed lying about the shed, but eventually he traced it to this filly and noticed that her buttocks and the tail were wet and dirty. He managed to raise the tail and found, as he described to me, a big black flattened swelling about the size of a small bowler hat.

Symptoms.—He brought the animal in and sent for me. On my arrival, the filly did not appear to be greatly out of sorts, she certainly was quiet for an unbroken animal, but she was eating long hay and breathing normally. She was caught and examined, and I found the swelling as described by the owner. The odour from it was frightfully offensive and it was as black as the ace of spades and showing several fissures on the surface.

It was the prolapsed anus and had apparently been out several days. It had become œdematous to such an extent that the membrane had undergone some degree of putrefaction and had yielded to pressure and ruptured.

I was rather surprised to see the animal so well—pulse 52; temp. 101.2 F.

Treatment.—The protruded part was washed well with a warm normal saline solution, and then with a weak solution of iodine, smeared with zinc ointment, reduced and replaced. I withdrew from the rectum and bowels more than a bucket full of fæces, none of which could be evacuated voluntarily, in spite of tremendous straining efforts. After several more saline enemata, I placed three tape sutures across the anal opening; gave the animal a physic ball, left some sodium sulph. to be given in the drinking water night and morning, and ordered a laxative diet.

For the first four days I visited her night and morning for the purpose of giving saline enemata, emptying the bowels, and dressing the pack. The tape sutures were removed in two days, the œdematous swelling soon subsided and one could then feel the fissures—running more or less in a circular fashion—about four inches from the opening.

After the fourth day, I visited her once daily and gave her the same treatment, and the owner was instructed to pump as much saline solution as he could with a Higginson syringe, but not to put his arm in.

In a few days' time from this, the filly could expel the fæces after enemata had been given and the offensive smell entirely disappeared. Eventually she commenced to pass a little fæces without the aid of enemata, thus showing that the fissures had healed and peristalsis was returning.

I must admit that on my first visit, prognosis was not favourable. I feared septicæmia—after reduction of the prolapsus—but it did not take place, and the animal made an uneventful recovery.

This case serves to show how great the natural powers of recovery are in some of our patients.

A Surprise at Calving.

By J. A. Barlow, M.R.C.V.S.

Subject.—Dairy shorthorn heifer in fresh condition.

History.—Bought at the market the previous day. Slight uneasiness but no definite pains. I arrived at the case about an hour after I received the first message, and found that the local "know-all" had done his bit, i.e., they had pulled the calf in two: the calf was coming tail first, therefore, I was confronted with the lumbar vertebræ and the sternum.

In addition the cow was bleeding considerably, and the vagina, etc., was much congested. The remains had to be turned, which was accomplished with a large amount of exertion. The forelegs were now roped, the jaw hooked, and things seemed in order for an "orderly exit," but nothing happened. Something was holding up the delivery, but as the head and legs were straight, I gave the order for a steady pull on both legs, whereupon they both parted company at the shoulder. The head was then noosed and came fairly easily, but with it was another head, or I should say, another head and neck, the necks being about six inches long from the bifurcation to the ears.

It was impossible to have felt the other head, for as one head was hooked and brought into the passage, the other naturally fell back. The cow survived the ordeal.

Torsion of the Uterus in the Cow.

"I was called to a farm for obstetrics in a young Holstein cow. Upon arrival I immediately saw the animal had been given the 'third degree' by the farmer, and I also saw his 30-30 rifle standing in a corner. Upon questioning, he said he had been working for about five hours with the cow and he knew there was no use calling me, for if he could not get the calf no one else could; but before shooting the animal, he was going to give the 'vet.' a chance.

"Upon examination, I found that we were dealing with torsion of the uterus. The cow was so completely worn out with the handling she had received that I decided not to try reducing the torsion by introducing my hand into the vagina, nor by swinging or rolling her, for she had had enough torture.

"I at once made an incision high in the right flank through the skin, and separated the muscles and peritoneum just sufficient to introduce my arm. I grasped the gravid uterus and rotated it one complete

(Continued at foot of first column next page.)

DIVISIONAL REPORTS.

Lancashire Division.

A meeting of this division was held at the Grand Hotel, Aytoun Street, Manchester, on October 31st' 1924, at 3-30 p.m. The Chair was taken by the President, Mr. J. D. Whitehead, and other members present were Messrs. W. A. Taylor, J. T. Allen, A. W. Noel Pillers, A. M. Munro, H. L. Torrance, J. W. Brittlebank, G. H. Locke, W. Woods, T. Wilson, J. F. Dixon, J. Holroyd, G. Lancaster, J. Spruell, F. G. Edwards and H. T. Matthews. *Visitors.*—Messrs. G. O. Davies and G. H. Livesey.

Apologies for unavoidable absence were received from Messrs. E. H. Curbishley, P. Lindsay, J. H. Carter, G. Mayall, E. J. Burndred, J. Clarkson, T. Millington, Warwicke Fowle and J. H. Wright.

The minutes of the last meeting were taken as read and approved.

The PRESIDENT said it was his painful duty to have to refer to the death of Mr. E. H. Stent, who for so many years carried out the office of Hon. Treasurer of that Association. Mr. Stent was a conspicuous figure at all the meetings; he worked hard and was an energetic official of the Association. Mr. Whitehead said he thought the loss felt through his death should be placed on record, and he proposed that a letter of condolence be sent to Mrs. Stent.

Colonel BRITTLEBANK, in supporting with deep sympathy the resolution proposed by the President, said Mr. Stent was a well-known personality—honest, lovable, and always working hard for the benefit of the profession to which he had devoted a great deal of his life.

The resolution was carried, all members standing.

The SECRETARY then read a letter from Mr. T. Eaton Jones, Liverpool, thanking the subscribers to the Royal Lancashire Agricultural Society's Silver Challenge Shield. He suggested that the balance of the money, three shillings and sixpence, should be handed to the National Veterinary Benevolent and Mutual Defence Fund. The Secretary stated this suggestion had been carried out.

A letter was read from the R.C.V.S. Librarian acknowledging a consignment of books sent by the Lancashire Division. The collection contained four volumes of the *Recueil*, for which he had been searching for many years.

A letter from the Secretary of the Western Counties Division with reference to the payment for veterinary services at dog shows, was read.

Mr. PILLERS proposed that no action be taken.

Mr. WOODS seconded, and the proposal was carried unanimously.

It was agreed that an Annual Dinner be held and that the arrangements be left to the Council.

Nominations.—Messrs. T. McGhee, Tom Hare, and R. P. Holmes, were nominated for membership.

New member.—Mr. R. C. Locke, of 98 Grosvenor Street, Manchester, was elected a member of the division.

ELECTION OF OFFICE-BEARERS AND COUNCIL FOR THE YEAR 1925.

Colonel BRITTLEBANK, in proposing that Mr. J. T. Allen, M.R.C.V.S., be elected President of the Association for the year 1925, said he had known Mr. Allen for a long time, and what he knew about Mr. Allen was such as he would like every man to know. He was a good fellow, practical, and he looked upon him as the soul of integrity. He was sure that not only would the Association honour itself in electing Mr. Allen to the Presidency, but, at the end of his term of office, would be glad to thank him.

Mr. LOCKE seconded the proposal, which was carried with enthusiasm.

Mr. ALLEN expressed his thanks for the honour. He would do his best to carry out the principles of the Association and would try to fill the office to the best of his ability. He asked the members to help him in his task.

Vice-Presidents.—Messrs. J. D. Whitehead, J. Holroyd and H. G. Hewetson.

Hon. Treasurer.—Mr. Noel Pillers.

Hon. Secretary.—Mr. J. Spruell.

Hon. Auditors.—Messrs. E. J. Burndred and J. H. Wright.

Members of Council.—Messrs. L. Butters, J. W. Brittlebank, C. Blackhurst, W. A. Taylor, F. Hopkin, G. H. Locke, E. M. Sumner, W. Woods, J. Hall and E. H. Curbishley.

Mr. Noel Pillers was appointed Hon. Treasurer of the Association for the remainder of the year.

N. V.M. A. Council Representatives.—Messrs. J. W. Brittlebank, G. H. Locke, C. Blackhurst, E. M. Sumner, J. H. Carter and the Hon. Secretary.

R.C. V.S. Council Candidates.—It was agreed that Messrs. J. H. Carter, H. V. Hughes and C. Blackhurst be nominated as candidates for election to the Council of the Royal College of Veterinary Surgeons, and that the division combine with other divisions, as in the past, for election of candidates.

A letter was read from the Secretary of the N.V.M.A. with reference to veterinary inspectors' fees, and promoted a long discussion.

THE ANTHRAX ORDER OF 1910.

Mr. J. HOLROYD opened a discussion on this subject in the following terms:—

(*Continued from previous page.*)

revolution to reduce the torsion. The fœtus was delivered and the incision sutured. The cow made an uneventful recovery.

"I shall never spend much time again in the rolling process, with elevating the cow's hind quarters, nor with any of the other like methods, for I believe the method described in the foregoing is easier on the veterinarian and patient. I am sure it is better for the owner, for this man is now a good client of mine. —GEO. W. STAGGS, B.Sc., D.V.M., in *Veterinary Medicine.*

At the last meeting of the Council of this Association it was decided to have a number of extra meetings at which we could discuss subjects of special interest to veterinary inspectors, both part-time and whole-time men. Although these special meetings will be of more interest to these men, it is hoped others will join in the discussions, for without the help of the general practitioner in reporting cases of suspected disease, the troubles of the veterinary inspector would be enormously increased.

I claim no special knowledge of anthrax or the Anthrax Order of 1910 and am only opening the discussion to "set the ball rolling." Most of you, whether as inspectors or general practitioners, will have met with some special points in the Anthrax Order and now is the time to raise these points, so that we can all benefit by the experience of others.

As you know, most of the administrative work of the Anthrax Order and, in fact, all the Orders under the Diseases of Animals Acts is carried out by the police, except in the case of boroughs or cities employing a whole-time veterinary inspector; nevertheless, I think it is necessary for the part-time man to be conversant with the details of the Orders.

We will deal first with an imaginary case of suspected anthrax and note the many points as we come to them, and afterwards I will make a few general remarks.

A farmer reports to a constable that he has an animal which has died suddenly and that he suspects anthrax. The constable reports to his sergeant who, in the country districts, is an inspector under the Diseases of Animals Acts. His duty is immediately to serve on the owner of the animal, Form C (Art. 4, Sec. 2), which, shortly, requires the owner to (1) prevent access of animals or fowls to the diseased or suspected animal, and (2) to detain on the premises all other animals which have been in contact with the suspected animal. The first part of this is important. As you know, in many cases blood exudes from the orifices soon after death, and if animals trample in this and then on to the fields, etc., it is a possible source of spread of the disease. I have seen dogs eat blood from an anthrax carcase and take no harm and, only in the last case I had, two cats were seen licking the blood—a fortnight afterwards they were both alive. It is important to have all hens penned up. In Art. 1 of the Order, I think cats should be added to the list of animals. The inspector must notify the Medical Officer of Health at this stage (Art. 2, Sec. 3). I think it would be soon enough if the Medical Officer of Health was notified after the veterinary inspector had certified the case as one of suspected anthrax. After service of Form C, the inspector notifies the Local Authority, who call on the veterinary inspector to investigate the case.

It is necessary for us to go provided with the following:—(1) Cotton wool or tow, with disinfectants for plugging the orifices; (2) sharp-pointed scalpel; (3) platinum needle; (4) stain; (5) spirit lamp; (6) microscope; (7) slide box, which contains cotton wool, swab on wire, and three or four slides.; (8) report form.

On arrival at the farm or premises, one makes a microscopic examination of the blood and finds one of three things:—

(1) No bacilli at all;

(2) Anthrax bacilli swarming all over the field;

(3) After a careful search, a few bacilli scattered irregularly about the smear, which resemble very closely anthrax bacilli.

In the first case the veterinary inspector definitely says anthrax does not exist and forthwith sends to the Local Authority a certificate, Article 5 (3), in the following or similar terms:—

This is to certify that I have this day examined the carcase of a cow belonging to Mr..... of.....in the parish of....., and after making a microscopic examination of the blood, I am of opinion anthrax does not exist.

Signed.....

The inspector serves the owner with Form D, which in effect withdraws Form C, Article 5 (3).

In the second case, where the veterinary inspector forms the opinion that anthrax definitely exists, he states that the case is one of *suspected anthrax* and sends to the Local Authority a certificate in the following or similar terms:—

Art. 5 (4)—

This is to certify that I have this day examined the carcase of a cow belonging to Mr..... of.....in the parish of....., and after making a microscopic examination of the blood, I am of opinion the case is one of suspected anthrax.

In this case an unstained smear and a swab of blood is taken and posted to the Chief Veterinary Officer of the Ministry at New Haw, Weybridge. A report on the prescribed form is also to be sent under separate cover and in order to fill this in completely it is advisable always to take one with you, otherwise, when filling in at home, you might find you have forgotten to ask the owner some questions necessary to complete the form satisfactorily.

The report form is straightforward and offers no difficulty in filling in, except perhaps, questions 1 and 2:—

Question 1. "Is the case, *in your opinion*, one of anthrax?" Our answer must be either "Yes," or "Suspected?" otherwise there would be no necessity to send the report.

Question 2. "If not anthrax, to what do you attribute death?" Personally, I always leave this unanswered, because I always put either "Yes" or "Suspected" to question 1.

Question 13. Number of in-contact animals living under same conditions as regards food or litter. This, of course, does not necessarily include all the animals of the class on the farm, because many may be on an entirely different kind of food.

Question 15. You will notice that cats are mentioned here, but not in the Order itself. I think fowls should also be included in this question.

With regard to general remarks of the report form, I find in *initial* outbreaks there is very little to say after having answered the preceding 17 questions.

Before leaving the premises, the veterinary inspector gives instructions for the carcase to be destroyed in accordance with Article 10. In the County of Lancashire (excepting towns and cities) the carcase is cremated in accordance with Section 1, Sub-section 1 of Article 10.

Perhaps a short description of a cremation pit will not be out of place at this juncture. For an average-sized cow an oval pit, 7ft. by 4ft. by 3ft. deep is dug, well away from a water-course or drain, with the long axis at right angles to the direction of the wind. The sides of the pit should slope inwards a little. Across the bottom of the pit, two trenches are dug, 9in. by 9in., in the form of a cross. One foot away from the edge of the pit on the windward side and in a direct line with the shorter cross trench, a draught hole is dug. This is 18in. wide, 4ft. deep against the pit and gradually comes to the level of the ground at a distance of 5ft. 6in. from the edge of the pit. At the depth of this draught hole a tunnel is dug through the intervening foot of ground into the short cross trench of the pit.

The quantity of fuel required to burn a carcase is about 12 cwts. coal, 10 to 12 cwts. of dry wood, 6 to 12 gallons of paraffin or petrol, according to the weather, and a quantity of straw. The pit is now filled with fuel. A layer of straw in the trenches and over the floor of the pit, well-saturated with paraffin, then a good layer of wood and then a layer of coal, and so on in layers until the pit is level. Three good strong pieces of timber are now laid across the pit and the carcase placed thereon. The fire is lighted from the draught hole.

After destroying the carcase, the place or building where the animal was at the time of death, and things that have been in contact; are disinfected in accordance with Article 13. The directions given are straightforward and need no comment, but I would like to ask how one would disinfect a full liquid manure tank to which the blood of a slaughtered anthrax case had gained access? The destruction of the carcase and the disinfection is carried out at the expense of the Local Authority.

So much for the definite cases, now what have we to do with those doubtful cases, those where we are inclined to think anthrax does not exist and yet one does not like to take the responsibility of saying so definitely, after having made a microscopic examination and probably the history of the case is suspicious. Reading from the Circular Letter A/190/C, dated September 24th, 1910, Board of Agriculture to Local Authorities:—"The veterinary surgeon acting on behalf of the Local Authority, etc., etc., and it is contemplated that he should himself arrive at an opinion as to whether or not disease exists and communicate it to the Board in the report he is required to make to them, but he will not embody the opinion in a certificate issued under the Acts."

This and Article 5 (4) of the Order make it clear that the carcase should be cremated. In nine out of ten of these cases, after about 10 days' interval the veterinary officers of the Ministry report that anthrax does not exist, and thus the Local Authorities are put to considerable expense, which I am afraid cannot be avoided.

After confirmation by the Ministry, the place where the disease existed becomes an infected place and Form A is served.

It is important to remember that this form must not be served in respect of a market place, fair-ground, sale yard, place of exhibition, *knacker's yard* or *slaughterhouse*, except by direction of the Ministry—Article 7 (5). Form A may be served on the occupier of *any* premises which, in the opinion of the Local Authority, have been infected with disease by the animal or carcase or exposed to infection therefrom—Article 7 (2).

If, in the opinion of the Ministry, anthrax does not exist, Form D is served, which is similar to that served if the local veterinary inspector is satisfied disease does not exist—Article 7 (4). The restrictions imposed by Form A remain in force until Form B is served—Article 7 (3), and I would have liked some definite time stated in the Order, which must elapse before taking off the restrictions. I consider eight days should elapse after the destruction of the carcase and completion of disinfection, provided that the other animals on the premises are quite healthy.

Article 10 (3) reads as follows:—"In no case shall the skin of the carcase be cut, nor shall anything be done to cause the effusion of blood, *except* by a veterinary surgeon *acting under the directions of the Local Authority*, and so far only as may be necessary for the purpose of microscopical or cultural examinations. Provided that nothing in this paragraph shall prevent a veterinary surgeon on behalf of the owner of the carcase from taking a sample of blood, or other fluid or tissue from the carcase for the purpose of microscopical or cultural examination in any case"—and now follows the important part—"in which neither the history of the case nor any external lesions in the carcase indicate the existence of anthrax." This is amplified in Circular Letter A/190/C. Personally, I think this latter part could be left out of the Order for several reasons:—

1. One often finds those cases which, from the history and external lesions, one would expect to be anthrax, negative in microscopical examination and *vice versa*.

2. As a general practitioner, I could not make a microscopic examination for the owner, but would have to report to the police. They would then call in a veterinary inspector of the Local Authority, should the case be in the district worked by myself as veterinary inspector, then I should be called in and would be able to then make a microscopic examination.

3. I consider one veterinary surgeon quite as competent as another to take all necessary precautions in a suspected anthrax case.

4. Considerable expense is saved the Local Authority if veterinary surgeons called in by the owner of the animal only report cases where there is some reasonable suspicions of the disease after making a microscopical examination.

I think most of you will agree that there are a great many more cases of anthrax than are reported. What is easier than for the farmer either to bury the animal, or send it to the knacker's yard, there to be destroyed in a few hours? It is only in those cases where there is a second outbreak shortly afterwards (and these are few—24 out of 515 outbreaks in 1922—*Report on the Diseases of Animals for the year* 1922) that there is any possibility of finding these cases out. In a case of this kind last year, a farmer lost a cow, sent it to the knacker's yard, and nothing further was heard about it. A week later, a second cow died, which was certified to be an anthrax death. The veterinary inspector of the local authority in which the knacker's yard was situated was informed, and after a careful search he found anthrax bacilli in the hide of a cow which had undoubtedly come from the farm.

Take sheep, for instance—only two cases in 1922. Surely this is too low a figure. The animals are small, easily disposed of, and farmers do not consider the death of a sheep of much importance.

Why do farmers not report cases of sudden or, shall I say, unexpected deaths amongst their stock? I think there are two main reasons. First, and I think in the majority of cases, the reason is that they (the owners) never think of anthrax at all—in all probability they have not seen the Anthrax Order or a copy of the leaflet, and they will not have had a case previously, nor will any of their neighbours. They simply say, "the animal is dead; it's no use bothering; send it to the knackers." Secondly, although some do think it may have been anthrax, they seem to have a dread of that word "Report," and they would rather run the chance of being found out, should it be anthrax.

Can anything further be done than is done at present to get the owners to report these suspected cases?

I think all stock-owners should be called on by the police at least once a year and left a copy of the anthrax leaflet. There would then be no excuse under the heading of "not knowing about the disease." A further, and serious, point for consideration is whether or not it would be advisable to pay compensation to the owner of an animal which has died of anthrax. Presuming £5 was paid for each of the larger animals, and £1 for the smaller ones (sheep and pigs), it would not cost the country a great deal of money; calculating on the 1922 returns it would amount to £2,840. At the present time an owner has nothing to gain by reporting a case, except that he is within the law, whereas if some compensation were payable, he may be £5 better off for his dead animal. I am confident some such scheme would appeal to the farmers and that we should then get somewhere near the actual number of anthrax cases.

In conclusion, I would like to say that I am convinced that in not more than 50 per cent. and, probably a much lower percentage, of cattle showing the premonitory symptoms of anthrax, does the disease prove fatal if treatment is adopted at the commencement. I will give you an instance. I was called on a Friday in September last year to a cow which was dead on arrival (the animal had been bled immediately after death). Anthrax was suspected, as the owner had lost a cow under similar circumstances the previous week. I made a microscopic examination and found anthrax bacilli. The herd consisted of 14 cows, and on taking the temperatures of these, found two had temperatures of 105° each; these animals were apparently otherwise in normal health. The first animal had a normal temperature by Sunday and kept normal until Wednesday morning, when it was up to 105°, and at night, 107°. At this time the animal was obviously ill with rigors, diarrhœa and at times it bled down the nose. It looked so much like dying that the owner asked me if he could start and dig the pit ready for cremation. By Friday morning it was normal again and kept so. The second animal was normal by Sunday morning after having been 107° on the Saturday morning. This animal afterwards kept normal, except Monday night (104°). The third animal commenced Monday morning with a temperature of 106.5°, 107° at night, 106° Tuesday morning, and died in the afternoon. Anthrax bacilli were found on microscopic examination and the carcase cremated. A fourth cow was 103.5° Saturday night, normal Sunday and Monday morning, but 105° Monday night, normal again Tuesday and Wednesday mornings, and up to 104° Wednesday night and Thursday morning, afterwards normal and remained so. One can have little doubt but that all these animals suffered from anthrax and that three out of the four recovered; whether they would have recovered without treatment I cannot say.

The only bearing this clinical note has on the Anthrax Order is in regard to Article 2, which reads as follows: "Every person having in his possession or under his charge a diseased or suspected animal or carcase shall, with all practical speed, give notice, etc., etc." The two important words are *suspected animal*. Should these cases be reported, and if reported what action could be taken under the Order?

Mr. ALLEN said he had been very interested in the paper and would like to know what action a veterinary surgeon would take if called to a case of suspected anthrax which was in another practitioner's district. He would also like to know the treatment for anthrax.

Mr. WILSON expressed his appreciation of the paper. With regard to keeping fowls away from carcases, he did not agree. He thought the farmer had enough to do in connection with an outbreak and would rather destroy the carcases and not report such cases if he had too many regulations to carry out. He agreed with Mr. Holroyd that compensation should be paid to the farmer. A veterinary surgeon was often called to a case in which the animal had been dead three or four days, putrefaction had set in and so the anthrax bacilli were destroyed. He would like to know if a veterinary surgeon was justified under such circumstances, in certifying anthrax. Mr. Wilson stated that the majority of cases he had

been called to had been dead on arrival. With reference to symptoms, they always got bloody diarrhœa and a high temperature, and one could always certify anthrax when those symptoms were present. With regard to treatment, he always gave that recommended in lectures by Professor Dewar—a strong purgative and turpentine twice daily. It is rarely a beast in poor condition had anthrax, and the object of a purgative was to weaken or thin the blood. In his experience he only had anthrax in pigs where there had been a history of a previous case. He cited a case of three cows which had large glandular swellings and a temperature of 108°; he gave the treatment he had described and the beasts recovered. He wished to ask if one found anthrax bacilli in the blood before death.

Mr. TORRANCE said he wished to express his thanks to the essayist for bringing forward such an interesting paper. With regard to Section 10, sub-para. 2 of the Order, he would like to know if a licence was necessary on each occasion, or if it was permanent. A veterinary surgeon might return a case of anthrax and the Ministry might negative that. Why should the Ministry not reply only to the veterinary surgeon instead of to the veterinary surgeon and the Local Authority?

Mr. EDWARDS thought the exudate from the lymphatic glands was used more than the blood to demonstrate the bacillus.

Mr. WOODS said he understood Mr. Holroyd to say that a veterinary surgeon called in to a case of suspected anthrax had not the right to take a blood smear.

Mr. HOLROYD pointed out that under the Anthrax Order of 1910, a veterinary surgeon had not the power to take a blood smear while the animal was alive.

Mr. WOODS said he thought that the Board intended that a veterinary surgeon should have the power to take a blood smear under the Order. He thought that a veterinary surgeon should have something to work on. He agreed with Mr. Holroyd that many animals with high temperatures and symptoms of anthrax often recovered. An animal with anthrax usually died within 24 to 36 hours of first symptoms, although he had known a case to live five days and then die of the disease.

Mr. WHITEHEAD asked what the effect of an outbreak of anthrax was on the production of milk. He cited the case of an outbreak of anthrax in a pig on a farm. The supply of milk was stopped by the Local Authority, although the case was well away from the shippon.

Mr. HOLROYD, in reply, stated in regard to Mr. Allen's queries, that in the case of an anthrax outbreak in another veterinary surgeon's district, it should be reported to the police, who would take the necessary steps. With regard to treatment, he always gave large doses of carbolic acid and turpentine, three times a day. It had been stated that no treatment was required, but if an animal died and no treatment had been given it looked, to the owner, like neglect on the part of the veterinary surgeon. He had never, in his experience, found anthrax bacilli in blood during life, although he once found some near the throat. With reference to anthrax in pigs, he had not had a case, but he understood that pigs became infected through eating some infected material. Mr. Holroyd stated that he agreed with Mr. Wilson's remarks about fowls inconveniencing farmers, although it seemed desirable that they should be kept away. With reference to putrefaction and destruction of bacilli, he pointed out that the carcase must be burnt immediately after death, and in regard to bloody diarrhœa, there was not much hope of an animal living when this condition set in. Concerning Mr. Torrance's remarks on Section 10, sub-para. 2, of the Order, Mr. Holroyd pointed out that this referred to a carcase burnt in the city. With reference to the Ministry sending notice to the Local Authority as well as the veterinary surgeon concerned, if the Ministry did not notify the Local Authority, the veterinary surgeon would have to do so. When there was any doubt, the veterinary surgeon should always return "anthrax" and so be on the safe side. As to the length of time that an animal with that affection would live, Mr. Holroyd cited a case of some animals that lived for three months with that disease. Regarding the milk supply, he would not stop the supply of milk where the anthrax case was away from the shippon.

A vote of thanks to the essayist was passed on the proposition of Mr. NOEL-PILLERS, seconded by Mr. WOODS.

Mr. WHITEHEAD said he hoped this was only the beginning of a series of lectures on subjects of this nature.

Specimens.—Mr. WHITEHEAD exhibited a specimen of bovine spleen affected with nodular tuberculosis, also a case of parasitic cyst in a frozen ox heart.

JOHN SPRUELL, *Hon. Secretary.*

Scottish Metropolitan Division.*

ANNUAL MEETING.

The annual meeting of the above division was held at the Royal (Dick) Veterinary College on 26th November, by the courtesy of the principal, Dr. O'Charnock Bradley. Proceedings were preceded by a Meeting of Council, at which the following nominations of office-bearers for the ensuing year were made:—

President: Dr. O'Charnock Bradley.

Secretary: Mr. J. Howard Jones.

Vice-Presidents: Messrs. J. Taylor, J. Aitken, and W. Wallace Peggie.

Members of Council: Messrs. W. Bannantyne, A. Baird, A. Gofton, and W. Inglis.

Representatives to Council N.V.M.A.: Mr. W. Wallace Peggie.

There were present at the Divisional Meeting the following members and guests:—

* Received on December 10th, 1924.

Messrs. W. Wallace Peggie, Dr. O'Charnock Bradley, A. Gofton, Major A. Baird, J. Taylor, J. Russell Greig, J. Aitken, W. M. Mitchell, P. Wilson, T. P. Young, Jun., J. D. Fulton, J. Macfarlane, A. Rutherford, W. C. Miller, J. Howard Jones, W. D. Lornie, J. A. Croft, E. G. Duncan, J. MacDonald, W. Tweed, and H. Begg.

Apologies.—Messrs. T. M. Inglis, J. Peddie, R. G. Linton, G. F. Boddie, A. L. Robertson, W. Anderson, J. Henderson, H. W. Robson, and J. Brown.

The Secretary read, for information, a letter addressed to him as Secretary of the Scottish Branch, from the Scottish Board of Agriculture *re* an International Dairy Congress proposed to be held in this country in 1926 or 1927, asking for the views of the Association regarding the proposed congress, and wishing to learn whether the Association considered it desirable that a conference of Scottish representatives of all sides of the milk question be called to discuss the matter.

Mr. A. GOFTON moved that the President of the Scottish Branch should represent the Branch at the proposed conference, and that the Secretary should intimate that that division considered the intended Congress to be most highly desirable.

The motion was unanimously adopted.

Nominations.—Messrs. W. Baird, Edinburgh; Pearson, Crieff; E. G. Duncan, Biggar; J. McDonald, Edinburgh; Smith, Edinburgh; and W. S. Lornie, Perth.

Election.—Mr. A. Rutherford.

The nominations of office bearers, as recommended by Council, were unanimously adopted.

The President, Mr. W. WALLACE PEGGIE, moved that Mr. A. Gofton be warmly congratulated by the division upon his election to the high honour of being president of the National Veterinary Medical Association. This was enthusiastically received, and Mr. GOFTON made suitable acknowledgement.

The retiring president was the recipient of the cordial thanks of the division upon his completion of two years of office.

Mr. W. C. Miller, M.R.C.V.S., of the Royal (Dick) Veterinary College, than read a paper entitled "The Physiology of Lameness," to be published later, the discussion upon which was postponed until the next meeting.

J. HOWARD JONES,
Hon. Secretary.

Central Division.

(*Continued from page* 1104, *Vol.* 4).

Concluding his Presidential Address, Major SIMPSON said:

Finally, then, I make the appeal to every Fellow to support his profession, his Society, and last, but not least, to remember that there are many sad cases of poverty and want among old members of the profession and their relatives and dependants, and therefore support as far as lies in his power our Benevolent Fund. I thank you for your patient hearing of these few scattered remarks, which in no way deserve the title of a Presidential Address.

The President's address was enthusiastically received and Mr. S. H. SLOCOCK asked the meeting to accord Major Simpson a very hearty vote of thanks. He did not know when he had listened to one so interesting. (Hear, hear.) The President had said he had been brief—he had been brief in one sense only, in that he had covered a vast deal of ground and, to his mind, that was just the sort of address which the Society wished to hear. (Applause.)

The vote having been accorded with acclamation, the PRESIDENT made suitable acknowledgement.

MORBID SPECIMENS.

Mr. H. L. ROBERTS: I should like to show the Fellows of this Society a tooth which we removed from a dentigerous cyst of a six years old pedigree Suffolk mare. There is nothing very unusual about it except that in our part of the country it is somewhat uncommon and, further, that there had been no attempts to remove it until the age of six years despite the fact that she was a pedigree mare. It was situated in the usual position at the base of the ear and had the usual intermittent aural discharge. I thought you would like to see the tooth, which was firmly implanted in the auditory process of the petrous temporal bone—the high development of the tooth is, I think, worthy of note.

Mr. H. C. JONES: I have here three fractured cervical vertebræ of a horse. The animal was put in a box and started capering and jumping about, and it fell over. I was in the next box, but before I got in the animal was standing in a peculiar crouching attitude, with the front legs bent. It seemed in some pain, particularly over the point of the mastoido-humeralis muscle. The horse lived three days. One vertebra is broken completely in half, one is broken at the articular surface and the remaining one in the body. I think it is peculiar that it should have lived three days.

Lieut.-Colonel T. D. YOUNG: I have from time to time spoken here about meat inspection and the importance of it at the present time—that importance is growing every day. As you probably know, in Scotland we have now got the veterinary profession in such a position that in a few years nobody will have anything to do with meat inspection but the veterinary surgeon. (Hear, hear.) In this country we have not got to that stage. Those of you who have visited the Central Markets (and we had the pleasure of the company of some of you this afternoon) will have been absolutely astounded at the amount of diseased meat which comes in from our own country. In our Annual Report for last year it has been quoted that though only 20 per cent. of the meat passing through Smithfield Market was of British origin, there was more disease in that meat than there was in the other 80 per cent.

(*To be continued.*)

NOTES AND NEWS.

The Editor will be glad to receive items of professional interest in these columns.

Diary of Events.

Jan. 6th—N.V.M.A. Council and Committee Meetings, 10 Red Lion Square, 2-30 p.m.
Jan. 7th—Foreign Voting Papers R.C.V.S. issued.
Jan. 7th—R.C.V.S. Examination Committee, 2 p.m.
Jan. 8th—R.C.V.S. Committee Meetings, 11 a.m. to 1 p.m., 2 p.m. to 5 p.m.
Victoria Veterinary Benevolent Fund Council, 5 p.m.
Jan. 9th—Publication Committee R.C.V.S., 11 a.m.
Finance Committee R.C.V.S., 12 noon.
R.C.V.S. Council Meeting, 2 p.m.
R.C.V.S. Special Council Meeting, 3-30 p.m.
Jan. 13th—Meeting of the Derbyshire Division at Derby.
Jan. 15th (3 p.m.)—Meeting of the Provisional Committee, Red Lion Hotel, Cambridge.
Jan 22nd—R.C.V.S. Special Council Meeting (probable date).

Royal College of Veterinary Surgeons.

OBITUARY.

STANLEY, E., F.R.C.V.S., Baulkham Hills, N.S.W. Graduated London, May 2nd, 1862. Died ——

GRAHAM, W., M.R.C.V.S., Rock Island, Ill. Graduated N. Edinburgh, April 26th, 1881. Died ——

BENGAL VETERINARY COLLEGE.

His Excellency the Governor of Bengal has been pleased to confer the Sanad of Rai Sahib on the Assistant Principal, Mr. D. K. Dey, G.B.V.C., for rendering conspicuous service under Government in the Veterinary Department for the last twenty-four years, at the Durbar, held at the Government House on the 2nd instant.

NEW MEAT REGULATIONS.

The Minister of Health has made Regulations entitled the Public Health (Meat) Regulations, 1924 (S.R. and O. 1924, No. 1422), as to the slaughter of animals for human consumption, the marking of inspected meat, and the conditions of storage, handling, transport, etc. of meat.

The Minister has also made an Order entitled the Rural District Councils (Slaughterhouses) Order, 1924 (S.R. and O. 1924, No. 1431), conferring on all Rural District Councils the powers of an urban authority in regard to slaughterhouses.

Copies of the Regulations, the Order and the covering Circulars (Nos. 547 and 552 respectively), dated the 29th December, 1924, may be purchased either directly from H.M. Stationery Office, Adastral House, Kingsway, W.C.2; 28 Abingdon Street, Westminster; York Street, Manchester; 1 St. Andrew's Crescent, Cardiff; or through any bookseller.

CORRESPONDENCE.

Letters to the Editor should reach the Office not later than by the first post on Tuesday morning for insertion in following Saturday's issue.

All correspondence must bear the name and address of the contributor for publication

The Editor does not hold himself responsible for the opinions of his correspondents.

Questions of Taste.

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—I notice Mr. H. Gray's letter in this week's *Record*. I wonder what he would say to a man who puts on his yard door, in letters nearly a foot long, M.R.C.V.S., F.E.V.M.A.

As a rule, men of this kind are always talking at veterinary meetings about raising the status of the profession. They also talk about being on a par with the medical profession.—Yours truly, JAS. BLAKEWAY.

Stourbridge,
December 30th, 1924.

Scottish Veterinary Colleges.

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—It is admitted that no more searching examinations take place in any profession in the world, than those conducted by the R.C.V.S.

For the last three years the following are the figures from Glasgow Veterinary College:

	Sat.	*Passed.*
1922	81 ...	59
1923	93 ...	70
1924	75 ...	50

So that both our total numbers and our total passes are serious and substantial. We are in a modest way succeeding in the task we have set ourselves.

We are doing this at a very small cost. Taking our total annual expenditure, and dividing it by the number of students registered during the financial year, the cost amounts to less than £50 per student, of which the contribution from the Scottish Board of Agriculture has averaged less than £12.

Our Building is adequate in size for about 100 students: this is more than we have at present, and is as many as can receive the best kind of individual teaching. I am not a brick and mortar man, and, with the help of a staff as able and devoted as any College ever possessed, I can continue to turn out good graduates from the present Building, with a very modest annual expenditure for alterations and repairs. Though we hold no Clinic, and perhaps because we hold no Clinic and so keep the goodwill of the local members of the Profession, our percentage of passes in the final year is much higher than that of all the Colleges taken together: so that our men are not suffering from want of practical training.

My claim is, that, as well as, if not better than any other College in the world, we have solved the problem of educating men for a Profession small in numbers and never very highly paid, at a cost more or less commensurate with the income they are likely to obtain.

Why are we being threatened with extinction? Why are we not to be allowed to carry on our modest but successful course? The answer is to be found in the

building incubus at the Royal (Dick). This building was designed, and I should say even over-lavishly designed, for a student body greater than that to be found in all the Colleges in the British Isles put together: and I doubt if it can ever be financed on a reasonable basis per student, till not only Glasgow, but London, Liverpool and Dublin close their doors.

I suggest that the Scottish Board of Agriculture give both Colleges a grant based on the number of students passing the Professional Examinations, so much per student per examination, and perhaps a bonus for those obtaining Honours: but no more money on any pretext whatever. If either College needs more, let them campaign at home. I am not at the moment allowed to set a definite figure per student per examination passed, but speaking for myself only, not for my Governors, I do not much care what amount is set, provided it be the same for both Colleges.

At the end of about four years, let the Board review the results: and then if they feel we are no longer worthy of support, I will be ready to accept their verdict.—A. W. WHITEHOUSE, Principal.

Glasgow Veterinary College,
23*rd December*, 1924.

The Etiology of Milk Fever.

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—In your last issue, Mr. L. P. Pugh wrote asking for a detailed account of some of the cases of milk fever we have met with in "dry" cows. These may be divided into two classes:—

(i) Pregnant cows, prior to calving.

(ii) Non-pregnant cows, which have previously borne calves, during fattening prior to slaughter.

In Class (i) the symptoms are identical with those met with in typical cases following parturition. In most instances they become very severe if treatment be delayed; if untreated they terminate in coma and death. In a few cases the disturbance appears to be located in the cord rather in than the brain, inability to rise may be the only symptom during the first twenty-four hours. If left longer untreated, these cases usually develop brain symptoms and die. Both types recover in a few hours after inflation.

In Class ii, although not so frequently encountered, the symptoms are usually more severe than in cows prior to calving. There is usually a great deal of frothing at the mouth and grinding of the teeth, with a greater tendency to mania. The attack often develops very suddenly and may be more rapid in its course than in cases occurring after calving. but responds even more readily to inflation treatment.

Below we briefly describe a few typical cases which have occurred recently:—

(i) Guernsey Cow, eight months in calf, had borne about six calves. Sold in open market preceding day. Found down in morning, unable to rise, but otherwise normal. When called in on same evening cow was flat on her side, very restless and unable to maintain normal lying position without support. Udder flaccid and shrunken; teats yielded a few tablespoonfuls of clear fluid of gelatinous consistency. The udder was inflated. Following morning, alert and feeding, lying position normal, cow rose twelve hours later without further treatment.

(ii) Guernsey Cow, fourth calf, due to calve in six weeks, dry in three quarters, but yielding a few ounces of thick yellow fluid from one teat. Seen at 6 a.m., then quite normal, down at 10 a.m., occasionally making futile efforts to rise and follow other cows. Inflated 11 a.m., rose 1 p.m.

(iii) Black Cross-bred Cow (Guernsey-Friesian), third calf due in a month. Showed signs of rambling whilst being driven to market. Returned home in a float. Comatose, when visited two hours later. Rose four hours after inflation. This cow was dry in all quarters.

(iv) Guernsey Cow, aged, showed symptoms of milk fever three weeks before calving, semi-conscious and struggling on ground. Recovery after inflation. Had four consecutive attacks commencing day after calving, at intervals of forty-eight hours. Died on fourth attack after making rapid recoveries in the three earlier ones.

(v) Was asked to see a barren-feeding cow, showing symptoms resembling those of milk fever. Found her down, comatose, foaming at mouth, stertorous breathing, udder shrunken and empty. This cow was apparently on point of death.

Whilst inflating this udder, we noticed another barren cow, in the same shed, staggering, and before we had concluded our attentions to the former, the second cow was down, but rose again and was inflated whilst standing, though her rambling made the task difficult. Both cows were normal in four hours.

We have encountered several other similar occurrences in barren cows. Cases six or eight weeks before calving and up to six months after calving are quite common in this district and owners are accustomed to the complaint appearing at odd times and regard it as quite a normal occurrence. It may be mentioned at this point that several factors may have an influence on the prevalence of milk fever at other times than after calving. These may be:—

(i) Atmospheric pressure. Warm foggy weather usually results in a crop of cases.

(ii) Rapid growth of grass in *old pastures*, as when rain follows a cold or dry period. Milk fever is seldom encountered on land regularly broken in this district. These conditions may also influence the prevalence of the condition after calving.

(iii) Oestrum in non-pregnant cows.

(iv) A slightly congested condition of one quarter is sometimes observed in barren cows affected. It is usually accompanied by the appearance of a small quantity of fluid resembling colostrum, but this factor is not always present. (iii.) and (iv.) may be synchronous and bear some relationship one to the other.

Mr. Pugh expresses surprise that we do not consider a restricted diet before calving of any use as a preventive of milk fever. It is the custom on many farms in this district, where the disease is so prevalent, to feed on straw and roots only during the fortnight preceding calving, but the practice has no apparent effect in reducing the number of cases.

As regards cessation of lactation, we find in most cases that there has been a diminution of the normal milk yield from the time of parturition. This symptom, together with the characteristic breathing, loss of appetite and

tendency to subnormal temperature, indicates the approach of milk fever several days, in some instances, before staggering is evident.

In connection with the statement that injection of half a pint of water cures when the total volume injected is less than that of the milk withdrawn, it must be remembered that before injections were thought of, the great majority of cows affected with milk fever died. After Schmidt's discovery we used to withdraw all milk and inject half a pint of pot. iodide solution into each teat; later this was replaced by normal saline with equally satisfactory results. Although great care was then taken to avoid introducing air, there was a sudden diminution in mortality from approximately 90 per cent. to 25 per cent. We of course recognise the greater advantage of inflation in shortening the duration of the attack and in diminishing the tendency to subsequent paralysis, and we make use of it daily in practice. We draw attention to this clinical fact merely because it may help in deductions concerning the etiology of the disorder.

In conclusion, we should like to mention that our criticism is not intended to be destructive, but to give Mr. Pugh the opportunity further to elaborate his theory to cover the points we have raised, chief of which is that milk fever, or a condition indistinguishable from it, may occur whilst lactation is temporarily or permanently suspended.

No doubt many other veterinary surgeons have observed the prevalence of milk fever in dry or barren cows and it is such articles as Mr. Pugh's that invite and are worthy of discussion and should induce other practitioners to relate their experiences and offer their deductions.—Yours truly, R. H. SMYTHE.

"St. Clair," Basset Road, Camborne.
16*th December*, 1924.

[This letter was unavoidably omitted from the issue of 29th December, owing to lack of space.—ED.]

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—I feel bound to take immediate notice of a remark in the letter of Mr. S. J. Motton which you publish this week. He states "Mr. Pugh indicates that the disease is cured by inflation, and suggests that it cures by inhibiting the flow of milk." I should be sorry that this view should get abroad.

The part played by inflation is, I suggest, as follows. Ketosis is a result of faulty metabolism. If it were normal, this metabolism would go on to the production of milk. Since it is abnormal and incomplete the milk supply in the udder usually fails. But the need for milk remains and is accentuated, or at least perpetuated, by the empty udder. If now the udder be fully inflated, that need is no longer felt. If it be partly inflated the need is lessened. In either case cure may result, but it will naturally be more certain with rather full inflation such as is commonly practised.

This theory is based on the assumption that a full udder affords the physiological stimulus (whatever exactly that may be) necessary to damp down milk formation. An empty udder, on the other hand, provides the opposite stimulus, and so throws an increased burden on the already overworked liver and aggravates the ketosis.

Inflation does incidentally decrease the flow of milk, altogether apart from milk fever. But decreasing the flow of milk and decreasing the demand for milk are by no means the same thing, and it is the second and not the first which I invoke as responsible for the cure of milk fever.

With Mr. Motton, I find myself unable to explain the diversity of opinion now manifested on the time of occurrence, etc., of milk fever. I am disposed to accept the statements in text books, perhaps because they coincide with my own experience, but it is evident that I have much more to learn about local variations.

Mr. Pottie's call for a new name to replace milk fever is too attractive to be overlooked. Scientists usually avoid their own language when seeking for names, probably because colloquial names are more apt to have several different meanings in various districts. May I suggest "galanosis," which is, I am informed, passably good Greek for "the milk disease."—Yours faithfully, L. P. PUGH.

Sevenoaks,
December 20th, 1924.

Treatment of Laminitis.

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—In my opinion, one of the most essential procedures in the successful treatment of an acute attack of laminitis was omitted in the article "New Lamps for Old," in your last issue.

I convinced myself long ago that the first thing to do is to put the patient down and keep it down for some hours, and for the next week not to allow the animal to stand more than six hours.

I usually cast the horse on first visiting the case, administer twenty-four ounces of raw linseed oil, have the shoes off, and apply warm bran poultices. A man stays with the patient to keep it down for three or four hours. In twelve hours another twelve ounces of oil are given, and, if the patient is standing, he is cast. After another twelve hours a further ten or twelve ounces of oil are administered, and then daily doses of salines.

Anyone who has observed the alteration in the frequency and character of the pulse and respiration, and in the facial expression cannot help being assured that relief has been given.

One might imagine the poor brute sighing out (a little after Wordsworth):—

I'm lying on the straw, and oh,
The difference to me.

By far the most severe cases of laminitis are those that occur after parturition. Here it is necessary to explore the womb, and to wash the organ out with antiseptics; otherwise the treatment resembles that for the dietetic form.

There is perhaps no equine malady in which the timely intervention of the veterinary surgeon is more helpful than in the affection in question. I have never seen bleeding from the jugular do the slightest good in these cases, though I have done it many a time. Bleeding from the toe or coronet does no good, and often does harm.

I am entirely opposed to exercising the patient for at least a week—in fact, until he moves round easily and can lift his feet freely when he is backed. The last case I had was that of a four-year-old heavy cart horse. He was worked until dinner time, and was then seen to be very ill, and was given a fever drink. I was sent for at night. The patient was cast, received thirty ounces of oil, and hot poultices were applied. Next morning the horse was again cast, the shoes removed, and oil given. At night, as he was standing, the horse was put down, but as the oil had acted no more was administered. For the following six days the animal was put down night and morning by the men on the farm. The horse was worked for two months, and was then sold to a horse dealer for sixty-five pounds. The owner told me himself that he never expected the horse to do any good.—Yours faithfully,
W. R. Davis.
Enfield.

Distemper.

To the Editor of The Veterinary Record.

Sir,—Mr. Livesey's excellent paper on Distemper seemed to have had the desired effect—that of creating a good discussion. From the remarks uttered by some of the younger members I am pleased to gather that some progress has been made in the general knowledge of the malady. On the other hand, I notice that some of the older practitioners cannot get away from the traditional teachings of their badly-informed forefathers, who learnt nothing from those excellent masters such as Louis Barrier, Erasmus Darwin, Edward Jenner, Blaine, and other careful observers who lived at the end of the XVIII. century, or the beginning of the XIX. century. Apparently the present day so-called clinician lacked that scientific spirit possessed by those who first studied the diseases of dogs.

Various writers on diseases of dogs for amateurs (1878-1916) scarcely mention the varioloid eruption of distemper, which seems to indicate that they did not make a careful but only a superficial study of the malady. Blaine (1817) mentioned that second and third attacks, even followed by death, did occur. I have seen numerous facts to confirm Blaine's statements; and so have many of my assistants, who have had to admit in face of them that the notions they were taught were absolutely erroneous. In this respect distemper does not differ from tuberculosis, tetanus, foot-and-mouth disease, influenza, strangles, enteric, small-pox, scarlet fever, measles, and many other acute and chronic infectious diseases which are all liable to recurrences, and even to be followed by death after a second or third attack. Seeing hundreds of cases is no indication of having observed one single case.

The logic of some men is: because they don't *observe* a fact they deny the existence of a fact observed by others. Some practitioners deny the existence of tuberculosis in dogs because they have not recognised it when confronted with it. It is the same with the varioloid eruption or its remains. The exanthema does not always occur in every case of measles, scarlet fever, small-pox, etc. (personal observations.)

Apparently it never occurred to Mr. Livesey's critics that distemper in its earliest stage was a septicæmia. The virus multiplied in the blood, and was found in the transudates as exudates in the pericardial, pleural and peritoneal sacs, and also in the watery discharge from nostrils. Carré demonstrated this about twenty years ago and, as to the watery or clear limpid discharge from the nostrils, Youatt pointed this out in 1830. The manifestations of the disease obtained by Carré in his experimental enquiry I had observed a long time before on clinical grounds alone.

Another common fact has been overlooked and that is: *The earlier phase or phases of the malady are often not recognised or interpreted as those of distemper until several weeks have elapsed and some sudden outburst of grave symptoms*, such as those of epileptiform, convulsions, or broncho-pneumonia, has made its appearance.

Not infrequently the earlier symptoms—dulness, loss of appetite, often ephemeral elevation of temperature, slight rigors or dulness in coat, a varioloid eruption, perhaps with slight diarrhœa or vomiting, ulceration of the internal ear, or of the cornea, may, in fine weather, last a week or so and then disappear for five or six weeks until stormy or wet weather sets in, when "fits" or other nervous phenomena or some other complication makes its appearance.

This "silent phase" has, so far as I am aware, never been mentioned by any other writer but myself. It seems to correspond to that "silent phase" often encountered in white-scour where those calves not manifesting any apparent, or only slight, symptoms at the beginning develop broncho-pneumonia or septic pneumonia ten or twelve weeks later. I know of many practitioners who have witnessed this "silent phase" in distemper. It has been particularly common in puppies of the sporting breeds this winter.

Another form never mentioned but frequently observed, or rather encountered, is the acute pneumo-enteritis in pups a few days after birth. For two or three days after birth the pups seem to thrive well, and then rapidly succumb. This occurs in infected kennels containing show dogs. Litter after litter go the same way.

It is an error to believe that all dogs waste away, even in the grave forms of the malady. Many keep their condition and even get fat, and may then succumb or have to be destroyed. It should not be considered grave for a dog to waste away gradually or slowly in the earlier stage; such cases are more likely to recover quickly and not hang about. Moderate diarrhœa, with very little wasting, is not a serious symptom.

Probably more dogs are destroyed by improper treatment or bad management than the disease would kill if the animals were left to choose for themselves. As a rule, the poor creatures have no choice in the matter: they have to submit to the hit or miss mind of the empiric. If practitioners were to study the clinical or natural history from the inception of the infection and follow the various symptoms, phases or phenomena in their proper sequence until recovery was obtained or death closed the scene, they would prove that they were scientific men just as much, if not more so, than if they were working in a research laboratory. A good clinician is a scientific man, born, not made: Sydenham, Jenner, Trousseau, Bretonneau, and a host of other physicians and veterinary surgeons are good examples. They differentiated one infectious disease from another and worked out its treatment or prevention, whether by the poleaxe, isolation, vaccination, or by doing away with its breeding ground, without the aid of the microscope, bacteriology, blood-test, etc. Let it be understood that I am not decrying complimentary means for the study of disease.

To unravel the clinical history of distemper, good clinicians with scientific minds, or minds for exactness, are required. Slip-shod or pop-gun methods or ricketty minds of the mountebank type will only produce men who can, perhaps, dogmatize or conjecture *ad lib.* Let us have facts as they are, and in their proper sequence, and not blatant opinions or assertions. Some men's minds on research and co-operation seem to lack the scientific basis to be of any real value in the progress of knowledge. They are deficient in the aptitude for accuracy or exactness.
—Yours faithfully, Henry Gray.
1 Redfield Lane, S.W.5.,
December 26th, 1924.

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